

Alconcl

16. (New) The method according to claim 7 wherein the clamp is in direct contact with the strain gage such that pressure and heat are simultaneously applied directly through the clamp to the strain gage.

REMARKS

Claims 1-13 remain in the application including independent claims 1, 7, and 10. New dependent claims 14-16 have been added. Claims 10-13 have been allowed. Claims 3-6 and 9 are indicated as allowable if re-written in independent form.

Claims 1, 2, 7, and 8 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Nishikawa et al. in view of Fridman.

Claim 1 includes the steps of applying a pressure force to a sensor against the mount with a pressure member and heating the sensor and mount through the pressure member to form a secure bond between the sensor and the mount. The examiner admits that Nishikawa does not disclose a method of securing a sensor to a mount by using pressure and heat and relies on Fridman to teach this modification

First, there is no suggestion or motivation to modify Nishikawa as taught by Fridman. Nishikawa is directed toward solving problems related to thin film resistors. Specifically Nishikawa seeks to reduce the effects of creep phenomena by using specific materials applied in a process including several different steps. Nishikawa forms a sensor in a predetermined pattern on a body by using a photoetching process. Fridman uses heated air jets to attach/detach pre-formed electrical components to a plate. To use the process of Fridman in Nishikawa would destroy the benefits achieved by Nishikawa with the photoetching process to reduce creep phenomena. Further, the two



processes are incompatible with each other. Thus, the combination of Nishikawa and Fridman is improper and the rejection under 35 U.S.C. 103(a) should be withdrawn.

Further, while the examiner argues that it is obvious to modify Nishikawa with Fridman, the examiner does not explain what the motivation or suggestion would be to make this modification. Applicant respectfully requests an explanation as to what the motivation, suggestion, or incentive would be to modify Nishikawa with the teachings of Fridman.

Second, even if the combination is proper the references do not disclose, suggest, or teach the features set forth in claims 1 or 7. Nishikawa teaches the formation of a beam body 2 that is degreased and cleaned. A fine powder of silicon oxide is mixed with a varnish of polyimide resin. This mixture is dropped on the cleaned surface of the beam body 2. The body 2 is rotated at hat 1500 rpm to make the thickness of the varnish film uniform. The body 2 is then heated at a predetermined temperature for a predetermined amount of time to evaporate the solvent and cure the resin. This forms a polyimide resin film having a uniform thickness on the body 2. Then resistance layer of nickel-chrome is formed by sputtering on this film and a gold layer is formed by sputtering on the resistance layer. A photoetching process is then used to form a predetermined pattern that includes resistance elements to form the sensor. Thus, the process in Nishikawa is very different than the type of sensor attachment set forth in claims 1 and 7.

Fridman teaches a system that both attaches and detaches electrical components from a mount. Fridman uses heated air jets that melt solder between terminals and conductors to attach/detach pre-formed electrical components. There is no component in Fridman through which both pressure and heat is applied to attach a sensor to a mount as set forth in claims 1 and 7. The examiner argues that Fridman teaches the use of such a component, however, provides no

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explanation of what specific structure in Fridman applies both pressure and heat through a pressure member to attach a sensor to a mount as claimed by Applicant. Applicant respectfully requests that the examiner provide a more detailed explanation of the rejection.

Applicant believes that all claims are allowable over the cited prior art. An indication of such is requested. Applicant believes that no additional fees are necessary, however, the Commissioner is authorized to charge Deposit Account No. 50-1482 in the name of Carlson, Gaskey & Olds for any additional fees or credit the account for any overpayment.

Respectfully submitted,

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CERTIFICATE OF MAIL

Dated: December /O, 2002

I hereby certify that the enclosed Response is being deposited with the United States Postal Service as First Class Mail, postage prepaid, in an envelope addressed to Assistant Commissioner of Patents, Washington D.C. 20231 on this <a href="https://doi.org/10.2023/encloses-page-10.2023

Laura Combs